

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A control unit for controlling the delivery of a combustible gas in a valve unit {2} of the type comprising having valve means {4} for shutting off the gas which are_is subject to the operational control of a magnetic safety unit {5} with_a thermocouple {10}, the control unit comprising: an electronic circuit assembly {12} arranged for connection to sensor means {13} adapted to detect the presence of inflammable vapours or other dangerous substances, said circuit assembly {12} being supplied by electric power generating means, the circuit assembly {12} comprising having an electronic type switch {14} acting on the electric circuit {11} for supplying the magnetic safety unit {5} so as to interrupt said circuit and operate said valve means {4} for closure in the presence of inflammable vapours detected by said sensor means {13}.

2. (Currently Amended) A-The control unit according to claim 1, wherein said electric power generating means comprise_having thermopile means {12a} supplied by the_a flame of a pilot burner {7} associated with said valve unit {2}.

3. (Currently Amended) A-The control unit according to claim 1, wherein said electric power generating means are_is of the type with battery {15}, and the circuit assembly {12} is arranged to be electrically supplied exclusively by said generating means with battery {15}.

4. (Currently Amended) A-The control unit according to one-of claims 1 to-3, wherein said sensor means {13} comprise_having transducer means adapted to transform the signal indicating the presence of inflammable vapours into an electrical magnitude sent to the circuit assembly, said circuit assembly {12} comprising having comparison means for comparing the value of such a magnitude with a preset threshold value and consequently sending an operating signal (S) for opening said electronic switch {14}, whenever the value of said magnitude is above the threshold value set.

5. (Currently Amended) A-The control unit according to claim 4, wherein said magnitude is an ohmic resistance (R).

6. (Currently Amended) A-The control unit according to claim 2, wherein the resistive part of the electronic circuit assembly {12} is electrically supplied by said thermocouple {10}.

7. (Currently Amended) A-The control unit according to claim 1-one or more of the preceding claims, wherein said electronic switch {14} is of the_a low resistance type and is connected in series with the thermocouple {10} and the magnetic unit {5} in said_electric circuit {11} for supplying same.

8. (Currently Amended) A-The control unit according to claim 1-one or more of the preceding claims, wherein said electronic switch {14} is of the type with MOSFET transistor.

9. (Currently Amended) A-The control unit according to claim 2-one or more of the preceding claims, further comprising electric power generating means with battery {15} which are_is arranged for electrically supplying the circuit assembly {12}, limitedly in a phase of

ignition of the pilot burner (7) and until the power produced by the thermopile generating means (12a) is sufficient to supply the electronic circuit assembly (12).

10. (Currently Amended) A The control unit according to claim 2-one or more of the preceding claims, wherein said generating means with battery (15)-are is electrically connected to an igniter device (16) for lighting the flame of the pilot burner (7) to provide sufficient power to said igniter device (16) in the flame ignition phase.

11. (Currently Amended) A The control unit according to claim 10, wherein said igniter device (16)-is controlled by said circuit assembly (12) to be disabled in the presence of inflammable vapours detected by said sensor means (13).

12. (Currently Amended) A The control unit according to one or more of claims 1 to 9 claim 2, wherein an igniter device (16) for lighting the flame at the pilot burner (7) is provided, and operated independently of the circuit assembly (12).

13. (Currently Amended) A The control unit according to claim 12, wherein said igniter device (16) is of the piezoelectric type.

14. (Currently Amended) A valve unit for the delivery of a combustible gas, particularly in water heating apparatuses, comprising a control unit (1) for controlling the delivery of the gas according to claim 1one or more of the preceding claims.